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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/734,517   | 12/12/2003  | Benjamin Atkin       | 51292/JEJ/D359      | 9983             |
| 23363  | 7590        | 12/23/2004           | EXAMINER            |                  |
| CHRISTIE, PARKER & HALE, LLP<br>PO BOX 7068<br>PASADENA, CA 91109-7068 |             |                      | O'CONNOR, CARY E    |                  |
|  |             | ART UNIT             | PAPER NUMBER        |                  |
|  |             | 3732                 |                     |                  |

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                              |                     |  |
|------------------------------|------------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b>       | <b>Applicant(s)</b> |  |
|                              | 10/734,517                   | ATKIN ET AL         |  |
|                              | Examiner<br>Cary E. O'Connor | Art Unit<br>3732    |  |

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 October 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 18-23 is/are allowed.
- 6) Claim(s) 1,4,11,12,14 and 17 is/are rejected.
- 7) Claim(s) 2,3,5-10,13,15 and 16 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 11, 14 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Balamuth et al (Re 28,752). Balamuth shows an ultrasonic dental insert comprising a transducer, a tip 66, a connecting body 75 disposed between and attached to the transducer and the tip, a retaining ring 81 snapped onto the connecting body, and a hand grip 52 fitted at least partially over the connecting body and retaining ring. As to claim 11, note the O-ring 110 located in a groove 109 in the connecting body. As to claims 14 and 17, the method of assembling an ultrasonic dental insert is inherently carried out when the insert of Balamuth is put together.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject

matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Balamuth et al (3,809,977) in view of Carmona et al (3,654,502). Balamuth discloses that the transducer comprises crystals. Carmona shows an ultrasonic tool wherein the transducer comprises a stack of nickel plates 22p. Nickel plates have a high resistivity that provides enhanced efficiency. It would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the crystals of Balamuth with a stack of nickel plates, in view of Carmona, in order to increase efficiency of the tool.

***Allowable Subject Matter***

Claims 18-23 are allowed.

Claims 2, 3, 5-10, 13, 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments filed October 21, 2004 have been fully considered but they are not persuasive. Applicant asserts that the ring 81 of Balamuth is not a retaining ring, but an o-ring and is not snapped onto the connecting body. It is held by the examiner that the ring 81 would have to be snapped onto the connecting body because it would have to be stretched to fit over the connecting body and would inherently "snap" into the groove 80. Furthermore, due to the friction created between the o-ring and the

handgrip, the o-ring would inherently act, so some extent, to retain the handgrip on the connecting body.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 571-272-4715. The examiner can normally be reached on M-Th 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Cary E. O'Connor  
Primary Examiner  
Art Unit 3732

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